GMJ
~~FWB~~
~~CMW~~
~~EHF~~
~~FIR~~
~~RHL~~
~~LHE~~
~~GHS~~
~~DFR~~
~~MGL~~ - file
~~WLJ~~ - Redding
MGL

R
REPORTS
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Gen
FWB
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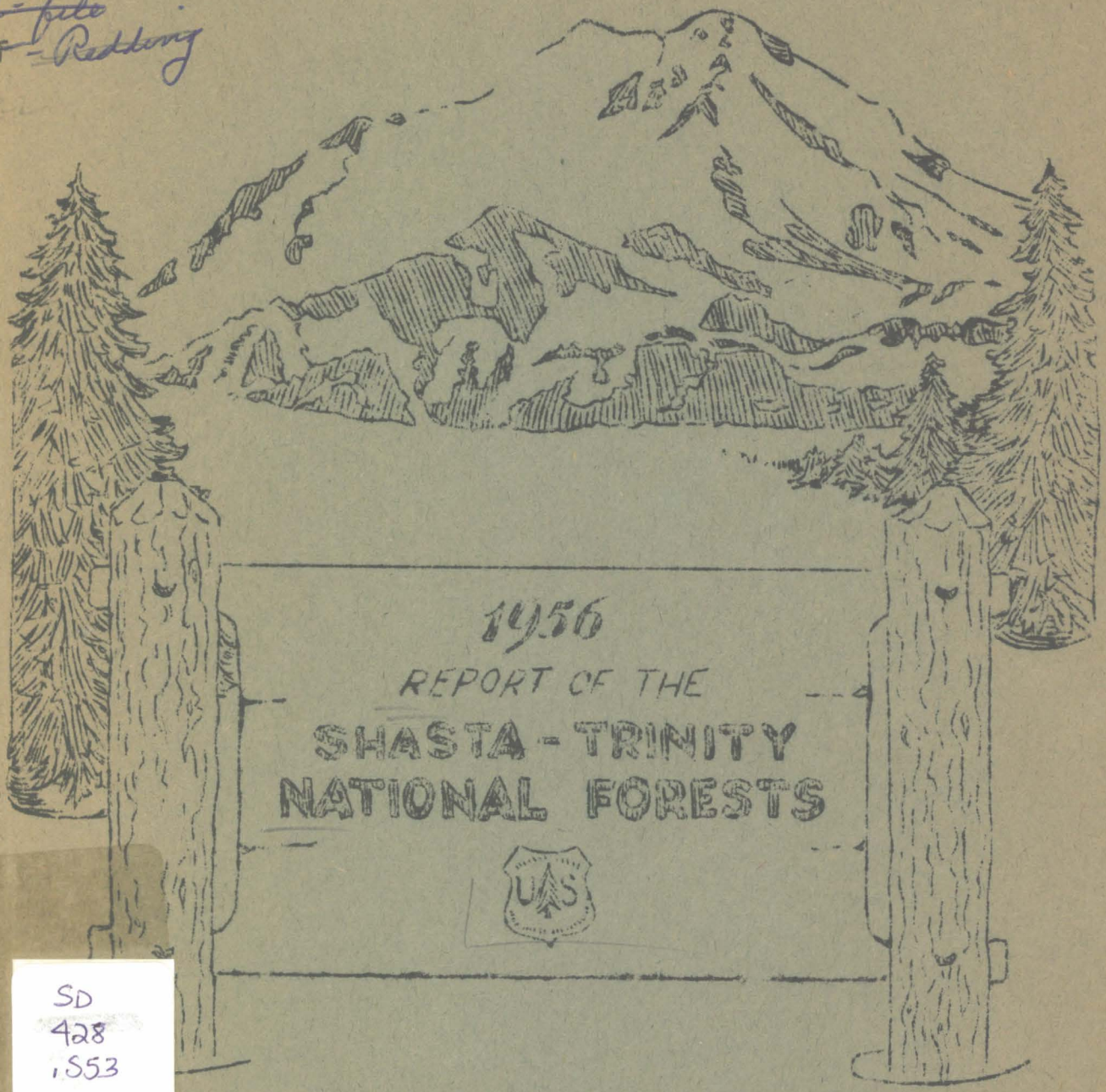

1956
REPORT OF THE
SHASTA-TRINITY
NATIONAL FORESTS

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INFORMATIONAL HIGHLIGHTS

The Shasta-Trinity National Forests make up one of the largest operating forest units in the United States. Consolidation of the two forests was effected in 1954 with headquarters established in Redding in conjunction with the Equipment Depot already in operation there.

Forest receipts on the Shasta-Trinity exceeded the operating expenditures in Fiscal Year 1956.

Large volumes of timber were cut throughout the forests in Calendar Year 1956 at a total value of over two million dollars. These large sales added immeasurably to the local economy which is based mainly on lumber. However, timber was not only cut on the forest; it was replaced by plantings made in burned-over areas, and after completion of cutting in a sale area the remaining stand was improved by both pruning and planting.

Fires remained at about the same number as average. However, burned area was held way below the five-year average due to greatly improved control methods resulting from constant study and experimentation. More and more stress is being placed on prevention of fires; consequently, fire prevention personnel have been increased although the overall fire control budget was not.

The engineering section of the Shasta-Trinity has been very active in road construction, completing over 60 miles of new timber roads during 1956. In some instances, these also open up new recreational areas.

Recreation use increased another five to ten percent during 1956. New campground units were constructed and many improvements were made on others with the additional personnel available for maintenance work. More new campgrounds and improvements are being planned for construction in the next few years.

Type conversion projects, undertaken jointly with the State Fish and Game Department, will rejuvenate 200 acres of browse in an area of heavy deer use as well as convert some brush areas to grass.

The large Trinity River Diversion Project is in the Shasta-Trinity area. The Forest Service administers all the lands over which the Bureau of Reclamation does not have primary jurisdiction. Timber

is now being disposed of on lands to be inundated. The project itself will consist of three dams and two tunnels (all with powerhouses), as well as irrigation canals. One of these dams, specifically the Trinity Dam, will be the highest earth-fill dam in the world.

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The following pages contain more detailed information under the following headings:

Condensed Statement Receipts and Expenditures
Timber Management
Fire Control
Engineering
Recreation Resource
Forage Resource
Mineral Resource
Type Conversion
Trinity River Project

TIMBER MANAGEMENT

The Shasta-Trinity National Forests contain stands of merchantable timber totaling about 19.5 billion board feet. Streamlined management plans, which guide the harvesting and management of this timber resource, indicate an allowable cut of 195.7 million board feet annually. These plans are being revised so that the more accurate inventories and growth studies will enable us to set our allowable cut more in line with growth. The year 1956 saw field work finished on a complete timber management plan for the Upper South Fork Working Circle and about one-third complete for the Shasta Lake Working Circle.

Seven advertised timber sales were made during 1956 with a total estimated volume of 65 million board feet for a total value of $937,000. There were quite a few small ranger district sales and right-of-way clearing sales in addition to the main advertised sales.

Logging was done on portions of twenty-four existing timber sales. In Calendar Year 1956 the total cut on the forest was 122 million board feet with a value of $2,120,659. This includes salvage of 15,248,000 board feet of fire-killed timber which is valued at $87,863. Cooperative deposits under the Knutson-Vandenburg Act totaled $138,267. These deposits are used on sale areas to improve growing conditions of the stand and the quality of the future crop by pruning, planting and release cuttings of various types. $28,114 was collected in additional

hazard-reduction funds. These are used to help protect cutover areas from fire after the purchaser's operations on the area have been completed. These deposits are authorized because of the increased fire hazard resulting from logging.

During the 1956 spring and fall planting seasons, 445 acres were planted to forest trees. Most of this, 424 acres, was on recent burns. There were 19 acres planted on timber sale areas. About 25 acres of brush on potential timber sites were cleared in staggered blocks and of this, about 4 acres were planted. Most of the planting was done by contract crews.

The Forest Service and Bureau of Reclamation are cooperating on cruising and disposal of timber in the Trinity River Project area.

Blister rust control activities are being centered in the McCloud and Pit Districts. Ribes eradication was completed on 734 acres of National Forest land and 972 acres of State and private lands. Average cost of eradication was $8.20 per acre. Five contractors worked on 19 contracts and destroyed 65,450 ribes bushes in covering this area. Sugar pine delineation surveys were completed on about 4,500 acres, both National Forest and private, of which about one-third is recommended for inclusion in sugar pine management areas.

FIRE CONTROL

The Shasta-Trinity National Forests give fire protection to an area of approximately three million acres. The 1956 fire season was a long one, with the first fire occurring April 4 and the last one on December 2. In severity, the 1956 season was about average.

The year's records show 290 fires of which 93 were man-caused and 197 were lightning. Numerous thunder storms throughout the season from May to September gave the forest a near-record number of lightning fires, 32 more than the five-year average. The man-caused fire total was 24 more than the five-year average. Smoker fires still lead the list of causes, but lumbering and railroad fires accounted for most of the increase in 1956.

Burned area for the year totaled 447 acres compared with an average of 3,224 acres. This record was made possible by use of air tankers (a new tool), increased use of smokejumpers, and good cooperation from State Division of Forestry, local people and companies.

This year marked the first wide-spread experimental use of air tankers as a fire control tool. A squadron of seven contract crop-duster planes was used on six Shasta-Trinity fires. Their most effective use is in

holding a fire small until crews can get to it. The tankers drop either water or chemical fire retardant.

Smokejumpers attacked twenty-eight fires on the forest, making a total of ninety-two jumps. In addition to the jumpers which we regularly use from Cave Junction, Oregon, during the summer jumpers were brought in from Missoula, Montana twice. Smokejumpers were able to control some of the worst back-country starts and surely contributed to the small burned area.

Suppression action by the ground crews is being continually improved by more and better roads, improved equipment such as tank trucks, and radio communication. We used a combination of ground forces, helicopters, smokejumpers and air tankers on some fires in 1956 to assure early control.

The Shasta-Trinity increased its fire prevention personnel in 1956. Prevention of fires is being vigorously promoted through the mass media of users. All man-caused fires are carefully analyzed to determine how they can be prevented in the future.

ENGINEERING

The forest engineering organization is responsible for the construction and maintenance of roads and physical improvements, including:

a. 2,300 miles of roads,
b. 300 bridges,
c. 275 buildings,
d. 1,600 miles of trails,

as well as sundry small projects such as water supply systems, sewage systems, etc. This year we have constructed six new residences, one new warehouse, two additions to ranger station offices, replaced three old timber bridges with new permanent structures and repaired about $100,000 flood damage to roads. The total budget for these activities was about $255,000.

Road construction is very closely related to the timber harvesting activity, the new roads being necessary to gain access to the timber areas. This year we have constructed about sixty-two miles of new timber roads. Of this total, twelve miles were built by the government and the remainder by timber purchasers. The budget for engineering and construction of the entire 62 miles of timber roads was about $1,060,000. The value of the roads built by the timber purchasers was about $1,000,000.

RECREATION RESOURCE

Recreation use on the Forest has increased another five to ten percent this year. From all indications it will build up even more rapidly in the next few years. Campground and picnic-area users totaled 262,000 man days. Of particular significance are the estimated 100,000 boating visitors reported on Shasta Lake. There were 290,000 visitors at Shasta Dam this year, exceeding all previous records.

Definite progress was made in the care and policing of the campgrounds. Successfully operated for the second consecutive year by concessionaires were the Antlers, Lakeshore, Lower Salt Creek and Deerlick Springs campgrounds. Fire crew personnel cleared 30 new campground units at the Antlers Campground during periods when they were not needed for fire suppression duties.

New construction money amounting to $10,000 is being invested in thirty new campground units in Antlers along with two new flush-type toilets, one at Antlers and one at Lakeshore. In addition, there have been sizable orders placed for new toilets, stoves and tables which will be used in other campgrounds this coming summer.

Completed and in operation this year under special use permit were two new trailer courts accommodating 100 trailers. Forty new summer home lots were made available at Salt Creek and Campbell Creek. Campground layouts have been staked and approved for nine new locations on the forest.

Expectations are high for early development of Mt. Shasta with completion of the John Everitt Highway scheduled for 1957.

The first conviction of persons charged with illegal entry into the Middle Eel-Yolla Bolly Wilderness Area occurred last fall. This case was successfully handled under the new Fish and Game Code, which provides handy legal recourse for continued protection of our wilderness areas.

FORAGE RESOURCE

The number of grazing permits on the forest continues to be about the same as the past several years. Over the past decade there has been a gradual and voluntary decrease in the numbers of permitted stock so that cattle numbers now total 3,417 for 12,696 animal months; sheep total 3,035 for 10,505 sheep months. Management plans are in preparation for four allotments. The $1,600 received annually for range improvement has been going to those range developments where the greatest return through increased carrying capacity can be obtained.

TYPE CONVERSION

A joint type-conversion project, handled with the State Fish and Game Department on Soldier Mountain area was initiated this year. This project will rejuvenate about 200 acres of browse in an area of winter deer concentrations, as well as convert some of the brush sites to grass types.

MINERAL RESOURCE

No field work has yet been done under Section V of the new Mineral Law 167. A favorable report recommending patent has been made on one mining application. Another mineral location, involving the construction of a summer home in a recreation area, has been contested.

TRINITY RIVER PROJECT

The purposes of the Trinity River Project are to store irrigation water, diverting it into Central Valley, and to produce power of 233,000 kilowatts. The yield for these two items annually is: Irrigation - 1,190,000 acre feet; Power - 1,060,000 kilowatt hours increase to the Central Valley Project.

The project should be completed in 1963 with an estimated cost of $225 million, not including the cost of the powerhouse. Of course, the costs may be higher due to rising prices. Repayment is to be made over a 50-year period from irrigation and power receipts.

The principle features are as follows:

1. Trinity Dam and powerhouse, which will be located on the main Trinity River at Papoose Creek. It is to be the highest earth-fill dam in the world (465 feet) containing 31 million cubic yards of material. The cost - $90,000,000. The power house will generate 75 to 80 thousand kilowatts and the dam will create a lake of 2½ million acre feet with a shoreline of 165 miles. The lake will fluctuate 40 to 80 feet.

2. Lewiston Dam and powerhouse, which will be located 1½ miles north of Lewiston on the main Trinity River, is to be a control-type dam, earth filled, 70 feet high, and contain 3 million cubic yards. This dam regulates the tunnel through the mountains into the Sacramento River watershed. The lake level will fluctuate only 4 or 5 feet.

3. Towerhouse Tunnel will be from Lewiston Dam to Whiskeytown Dam. It will be 11 miles in length with a 17½-foot completed bore. Cost - $20,000,000 to $25,000,000. The powerhouse at the end will generate 70 to 80 thousand kilowatts.

4. Whiskeytown Dam is below the present location of Whiskeytown on Highway 299 E. It will be an earth-filled construction 278 feet high. The cost in unknown at the present time. The lake created by the dam will have a 250,000 acre-feet storage capacity.

5. The Spring Creek Tunnel will be from Whiskeytwon Dam to Keswick Reservoir, a distance of 4 miles, with a powerhouse at the end. No estimate of costs as yet.

6. Irrigation canals.

CONDENSED STATEMENT RECEIPTS AND EXPENDITURES

FISCAL YEAR 1956 (JULY 1, 1955-JUNE 30, 1956)

	RECEIPTS	EXPENDITURES	
		Operating	Investments
National Forest & L.U. Proj. Protection & Management		$587,936.08	$113,391.03
Fighting Forest Fires		620,453.26	1,809.87
Forest Pest Control		13,093.96	--
Cooperative Range Improvements		545.11	1,222.34
Roads & Trails - Const. & Maint.		314,745.47	327,380.75
National Forest Receipts Forest Reserve Fund:			
Shasta	$1,154,799.94		
Trinity	1,255,591.89		
TOTAL SHASTA-TRINITY FORESTS	$2,410,391.83	$1,536,773.88	$443,803.99

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Cash receipts exceeded Operating Expenditures by $873,617.95.

25%, amount returned to counties for roads and schools, $602,597.96.

Shasta County	$ 97,871.72
Trinity County	314,087.41
Siskiyou County	157,879.36
Tehama County	30,438.35
Humboldt County	1,313.12
Modoc County	1,008.00